EVIDENCE BASED MANAGEMENT OF RESECTABLE ORAL CANCERS- PRESENT GUIDELINES

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- H & N Cancer common in India- account for 30% cancers in males and 13% in females
- Males- Oral cavity and pharynx; Females- oral cavity
- Nearly 60% present with locally advanced disease
- About 95% of oral cavity cancers are SCC
- Frequently associated with risk factors of chronic smoking or alcohol use.
- Combination of tobacco and alcohol – a multiplication effect (OR = 177).
- Past few years clearly shown- presence of HPV 16 in serum represents a further risk factor.

DIAGNOSIS

All patients with mucosal lesions of unknown origin and >2 weeks' duration_immediately be referred to a specialist.

- White or red spots anywhere on oral mucosa
- Mucosal defect or ulceration
- Swelling anywhere in oral cavity
- Loosening of ≥ 1 teeth-unknown reason- not with periodontal dis.
- Persistent foreign body sensation-particularly unilateral
- Pain
- Difficulty or pain in swallowing
- Speech difficulties
- Reduced mobility of tongue
- Numbness of the tongue, teeth, or lips
- Bleeding of unknown origin
- Neck swelling
- Fetor
- Altered dental occlusion.

DIAGNOSIS

- Exclude synchronous secondary tumours- also be examined by ENT specialist and endoscopy considered.
- Synch. mets.- 4% to 33%, depending on size of primary- frequent in stages T3 & T4 & patients with level IV LN inv.
- CT or MRI to be done
- Panoramic section –a basic tools in dental diagnosis- before commencement of specific therapy
- PET-CT- no part in primary diagnosis of local extension of known oral cavity cancer
- Patients with advanced oral cavity cancer (stage III, IV) -CT of thorax to exclude pulmonary involvement
- Previously undetected primary tumours and distant spread- diagnosed more reliably with PET-CT than with CT or MRI .

DURING ASSESSMENT AND TREATMENT

Patient Support

Where possible patients to have following support in place:

- oncology nursing personnel,
- a speech-language pathologist (SLP),
- a registered dietician,
- a social worker.

Dysphagia

- To receive appropriate speech and language therapy to optimize residual swallow function and reduce aspiration risk.
- Patients to have access to instrumental inves. for dysphagia.
- Modified barium swallow and fibreoptic endoscopic evaluation of swallow -valid methods for assessing dysphagia.
- Decide most appropriate method for patients in different settings.

DURING ASSESSMENT AND TREATMENT

Nutritional Support

- Patients screened at diagnosis for nutritional status using a validated screening tool appropriate to patient population (BMI, nutrient intake, weight history).
- At-risk patients- early intervention for nutritional support by experienced dietician-considerations of nutritional supplements and pharmacological interventions.
- Team to include healthcare professionals skilled in feeding tube placement (percutaneous gastrostomy, gastrojejunostomy, NG).
- Feeding tube insertion **considered for individuals presenting with one or more of the following**:
  - Sig. weight loss (>5% in one month or >10% in 6 months)
  - BMI <18.5
  - Dysphagia, anorexia, dehydration, pain, or other symptoms interfering with ability to eat.

DURING ASSESSMENT AND TREATMENT

Smoking Cessation

- Patients provided with information & assistance with access to drug therapy & counselling to stop smoking prior to & during T/t.

Support Requirements

- Patients be assessed for psychosocial needs.
- Patients offered information about support groups if any.

Information Needs

- Leaflets about risk factors, prevention, and early detection of oral cancers.
- Information about their diagnosis & treatment provided on more than one occasion prior to onset of treatment.
- Information to be individualized.

TREATMENT- Modality Specific

Overview of Treatment of Primary Tumour and Neck

First Line Treatment

- Those planned for resection or whose mandible and/or major salivary glands to be included in RT field- consider pre treatment assessment by dental oncologist
- Treatment approach formulated by a multidisciplinary team(MDT) in consultation with patient.
- Individual patient and tumour characteristics, and patient preference to guide management.

TREATMENT- Modality Specific

Overview of Treatment of Primary Tumour and Neck

Treatment of the Primary Tumour

- All options for definitive locoregional treatment including RT, CT, and surgery to be discussed with patient.
- If organ preservation (RT±CT) approach is to be utilized, follow-up and salvage surgery must be available.
- After surgical resection, PO adjuvant RT± CT considered

Treatment of N0 Neck

- Patients with clinically N0 neck, with more than 20% risk of occult nodal metastases- prophylactic T/t of neck by appropriate:
  - Selective/ MR neck dissection *or*
  - External RT

TREATMENT- Modality Specific

Radiotherapy as the Major First-line Treatment Modality

Conventional Fractionation

- Overall T/t time from surgery to completion of PO RT to be 10-11 weeks or less in absence of PO medical or surgical complications.

Altered Fractionation

- Where RT primary T/t modality for advanced disease, moderately accelerated schedules (6 fractions/week) or hyperfractionated schedules with increased total dose considered as alternative approach for patients unable to receive or decline CCRT or other systemic therapies.
- Altered fractionation regimens individualized for patients >70 yrs.
- If altered fractionation-:Adequate monitoring and support for acute toxicity during and after treatment.

TREATMENT- Modality Specific

Radiotherapy as the Major First-line Treatment Modality

Radiotherapy Planning

- Planning CT data downloaded into TPS
- Relevant targets & normal tissues contoured on planning CT
- Volumetric radiation planning performed- uniformity in prescribed dose to PTVs with minimal dose to PRVs and OARs.
- Specific predefined standards adhered to in terms of mean, med., max. & min. dose acceptable to both targets and OAR.
- Radiation plans generated to undergo QA review by Radiation Oncologist and Medical Physicist prior to implementation.

TREATMENT- Modality Specific

Radiotherapy as the Major First-line Treatment Modality

Radiotherapy Planning

Following contoured on planning CT data set:

- GTV for both primary site and involved nodes or nodes at high risk of involvement with grossly visible disease
- CTV
- Organs at risk anticipated to receive any radiation either in or close to the treated volumes to be contoured.
- PTV
- PRV (Planning Risk Volumes)
- Following OARs: spinal cord, brainstem, optic nerves and optic chiasm

TREATMENT- Modality Specific

Prevention and Management of Radiation Side Effects

Examination and Assessment

- Patients undergoing RT examined wkly (as minimum) by treating radiation oncologist for assessing toxicity and response to T/t.

Prevention and Treatment of Radiation-Induced Mucositis

- Patients being treated with RT be offered oral rinses including local topical anaesthetics before, during, and up to 3 weeks after completion of RT.
- Patients advised on how to maintain good oral hygiene during and after RT
- Patient mucosa be inspected regularly during T/t, and analgesia & antimicrobial/antifungal agents to treat infection made available.

TREATMENT- Modality Specific

Prevention and Management of Radiation Side Effects

Prevention and Treatment of Radiation-Induced Xerostomia

- Radiation doses to major salivary glands kept as low as reasonably achievable without compromising dose to PTV.
- Limiting parotid doses <26 Gy (mean) and <30 Gy (median)- shown to result in improvement in subsequent parotid function.
- Pharmacological therapy should be considered to improve or reduce radiation-induced xerostomia.
- Patients with chronic xerostomia following RT be encouraged to maintain good oral hygiene.
- Should have regular dental assessment.

TREATMENT- Modality Specific

Surgery as the Major First-Line Treatment Modality

Resection

- If inadequate initial excision biopsy performed *or* if excision with +ve margins, re-resection considered where technically feasible.
- If re-resection not possible, PO RT be considered.

Reconstruction

- Surgical reconstructions be available for patients undergoing extensive surgical resection.
- Reconstruction performed by appropriately trained & experienced surgical teams.
- Choice of technique made on an individual basis :
  - According to anatomical location of tumour.
  - General condition of patient.
  - Patient and surgeon preference.

TREATMENT- Modality Specific

Surgery as the Major First-Line Treatment Modality

Adjuvant Radiotherapy Following Surgery

PO RT considered following surgical resection for patients with any following adverse risk features:

- Advanced T-stage
- Close or positive surgical margins
- Perineural invasion
- Lymphovascular invasion: ≥2 +ve nodes
- Positive nodes at level IV or V
- N2 or > nodal involvement
- Extracapsular lymph node spread

TREATMENT- Modality Specific

Surgery as the Major First-Line Treatment Modality

Adjuvant Radiotherapy Following Surgery

- PO RT should be conventionally fractionated:
  - 54-60 Gy /27-30 #/ 5.5-6 weeks to primary and nodes at risk.
  - 66 Gy/33 #/6.5 weeks to areas of very high risk.
- PO CCRT- single agent cisplatin+conventional RT in: medically fit patients with:
  - ECE *and/or*
  - +ve surgical margins
- Patients not fit for CT- only conventionally fractionated RT.
- Decision of PO RT or CTRT in consultation with patient & MDT.

Chemotherapy in Combination with Surgery

- Little evidence to support routine use of neoadjuvant *or* adjuvant CT in combination with surgery in oral cavity cancer.

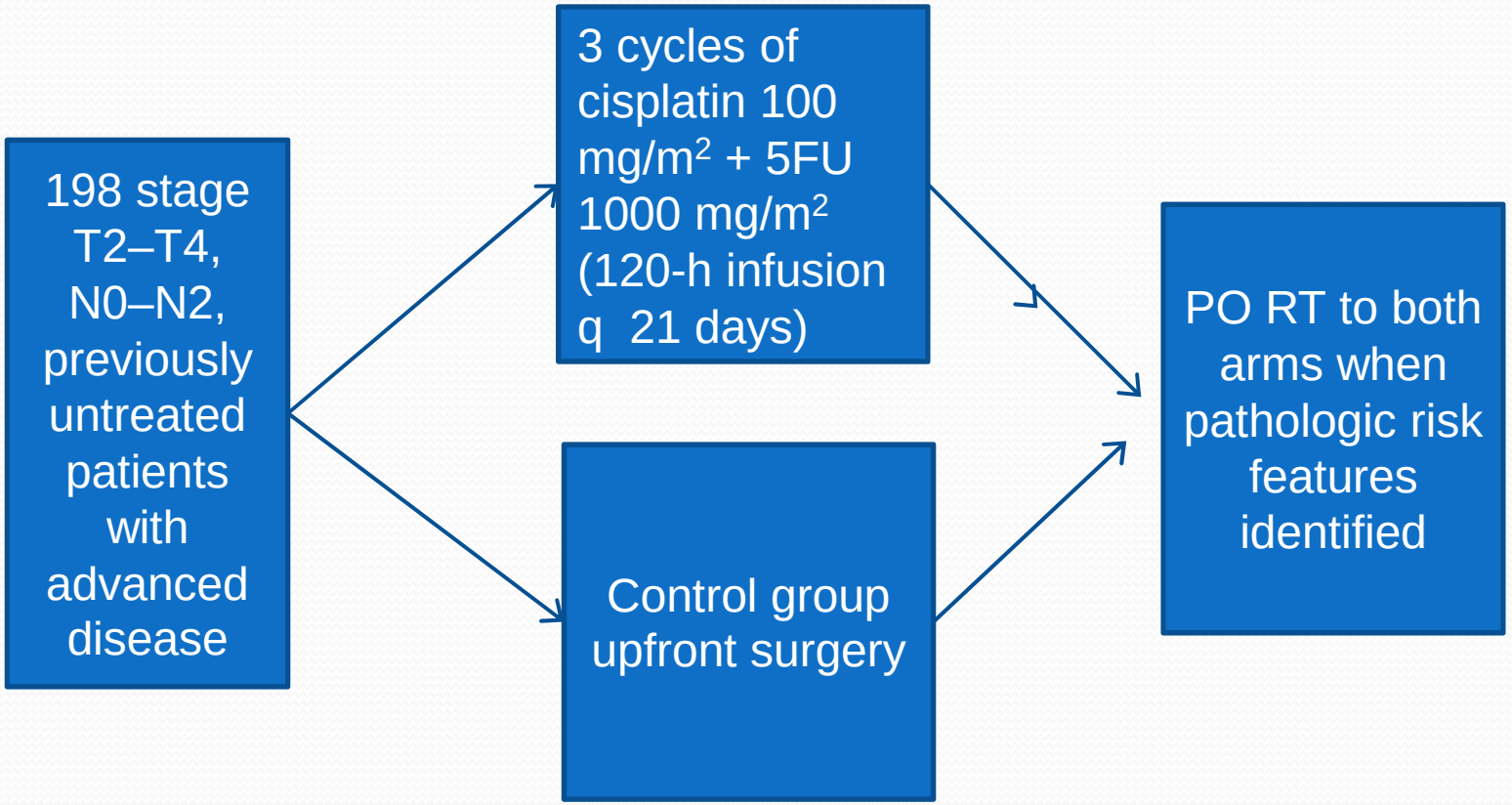
original article

Annals of Oncology 00: 1–5, 2014
doi:10.1093/annonc/mdt555

Preoperative chemotherapy in advanced resectable OCSCC: long-term results of a randomized phase III trial

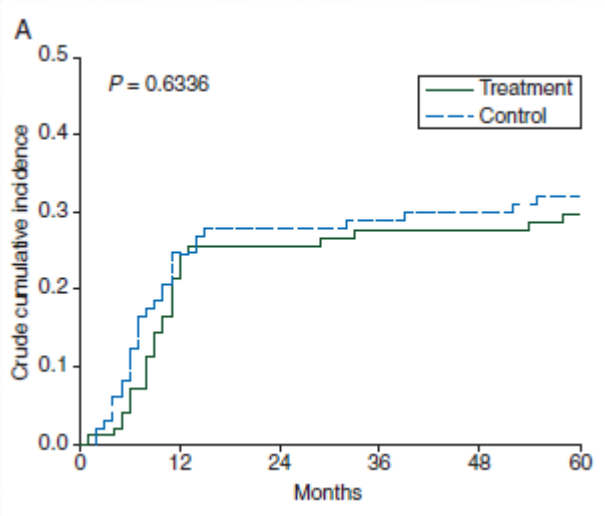
P. Bossi[1], S. Lo Vullo[2], M. Guzzo[3], L. Mariani[2], R. Granata[1], E. Orlandi[4], L. Locati[1], G. Scaramellini[3], C. Fallai[4] & L. Licitra[1]

- Randomized, parallel, multicentre trial



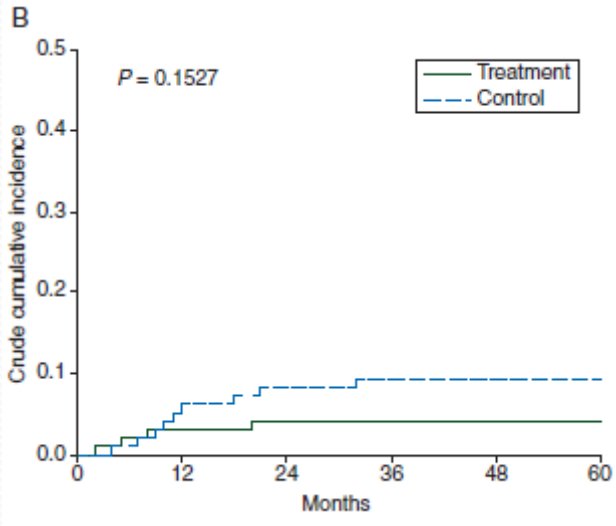
- The co-primary end points: locoregional or distant relapse, and death.

Incidence of locoregional relapse



No difference in LRR (P = 0.6337)

Incidence of distant metastases



No difference in distant metastases (P = 0.1527)

- Long-term FU-No survival benefit with preOP CT in oral cavity cancer.
- Late toxicity similar in both arms except that fibrosis and dysphagia, less in CT arm.
- Survival benefit for patients achieving a pCR was maintained.

TREATMENT- Modality Specific

CT + Surgery or Radiotherapy as First-line Treatment

Chemotherapy Alone

- No evidence to support use of CT alone as a curative treatment.

Chemotherapy with Locoregional Therapy

- Medically fit for CT patients with locally advanced non-metastatic scc of oral cavity (especially those aged 70 or under), CCRT considered rather than RT alone if:
  - Organ preservation is goal.
  - Primary tumour unresectable or surgically incurable.
- Single-agent cisplatin recommended as agent of choice in CCRT
- CCRT administered where appropriate facilities for monitoring toxicity, with rapid access to outpatient and inpatient support .
- If neoadj. CT used, docetaxel/cisplatin/5FU (TPF) has higher response & surv. rates with similar safety to cisplatin +5FU.

Adjuvant Chemotherapy

- Use of adj. CT following surgery *or* RT not recommended.

MANAGEMENT OF ORAL CAVITY CANCER

Early Oral Cavity Cancer (Stage I and II)

Primary Treatment

- Management individualized for each patient.
- Decisions regarding choice of primary treatment modality:
  - Made in consultation with patient.
  - Take into account anatomical location of tumour.
  - Functional results associated with available T/t.
- Patients treated by surgical resection.
- In situations where bone removal required for clear margins, rim rather than segmental resection done, where possible.

Brachytherapy

- Where expertise available, brachytherapy used:
  - Alone (60 to 70 Gy) for T1 lesions *or*
  - As boost (20to 40 Gy) for T2 tumours of oral cavity (mobile tongue, floor of mouth, buccal mucosa).

MANAGEMENT OF ORAL CAVITY CANCER

Early Oral Cavity Cancer (Stage I and II)

Re-resection

- Re-resection considered to achieve clear histological margins if initial resection has +ve surgical margins.

Reconstruction

- Reconstruction performed where necessary following surgical resection to achieve good functional & cosmetic result.

N0 disease

- The clinically N0 neck (levels I-III) treated prophylactically:
  - external beam radiotherapy *or*
  - elective neck dissection for tumours involving the oral tongue or floor of mouth with depth of invasion>4mm.

Postoperative Radiotherapy

- PO RT for patients with clinical and pathological features indicating high risk of recurrence as per SIGN recommendations.

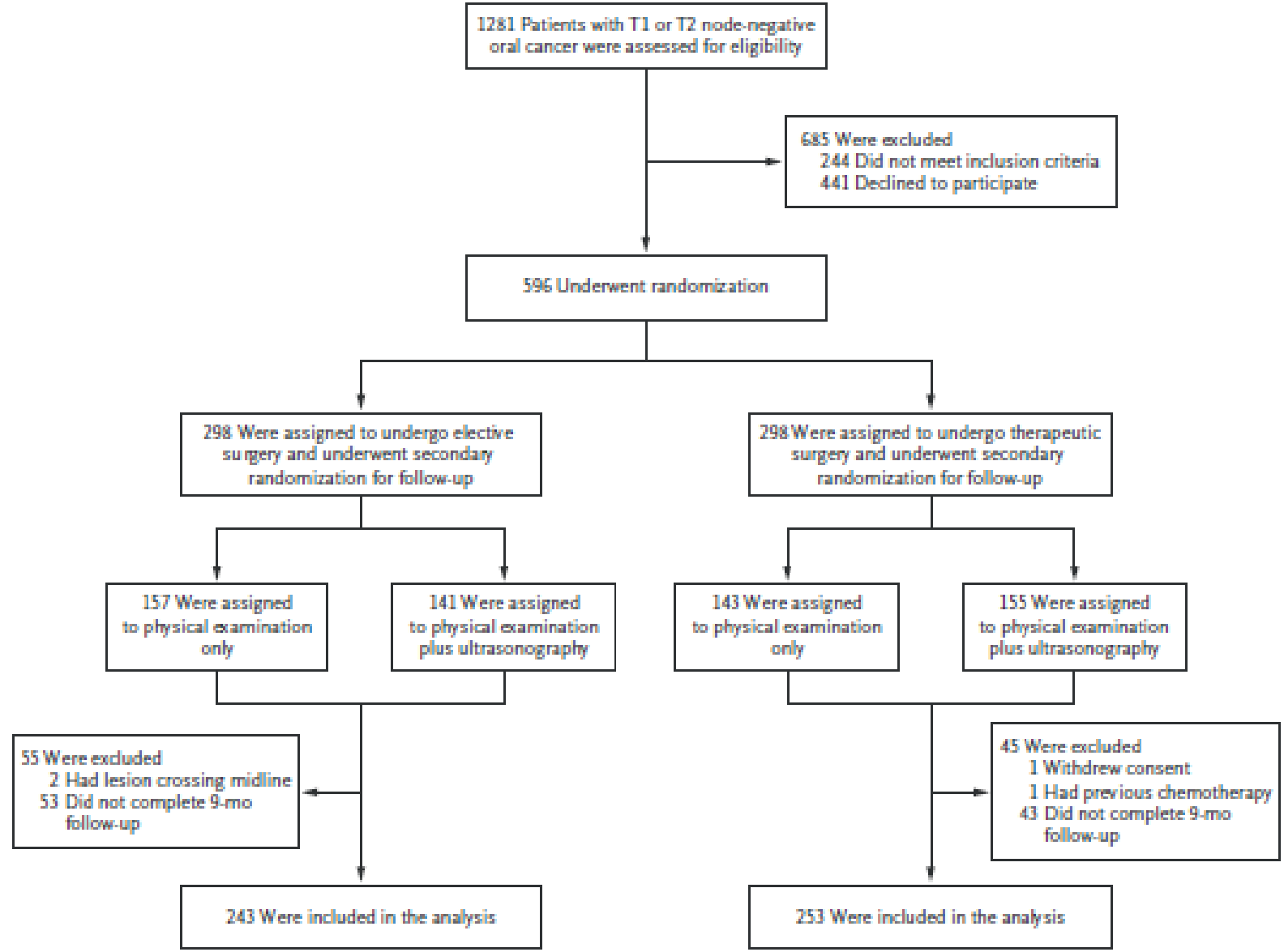
The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

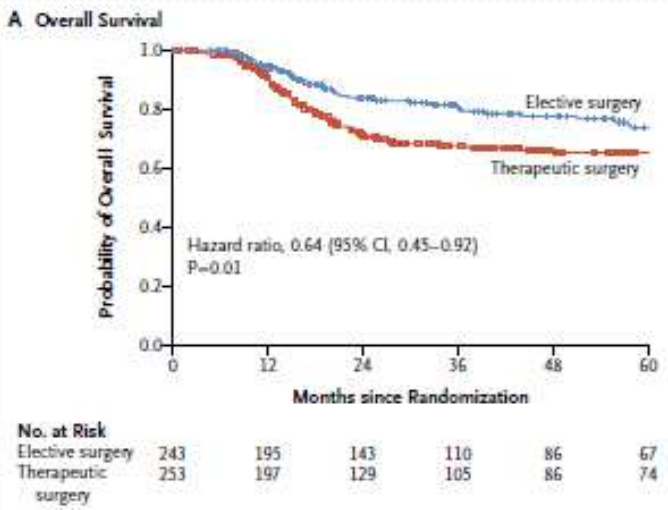
Elective versus Therapeutic Neck Dissection in Node-Negative Oral Cancer

Anil K. D'Cruz, M.S., D.N.B., Richa Vaish, M.S., Neeti Kapre, M.S., D.N.B., Mitali Dandekar, M.S., D.N.B., Sudeep Gupta, M.D., D.M., Rohini Hawaldar, B.Sc., D.C.M., Jai Prakash Agarwal, M.D., Gouri Pantvaidya, M.S., D.N.B., Devendra Chaukar, M.S., D.N.B., Anuja Deshmukh, M.S., D.L.O., D.O.R.L., Shubhada Kane, M.D., Supreeta Arya, M.D., D.N.B., D.M.R.D., Sarbani Ghosh-Laskar, M.D., D.N.B., Pankaj Chaturvedi, M.S., F.A.I.S., Prathamesh Pai, M.S., D.N.B., D.O.R.L., Sudhir Nair, M.S., M.Ch., Deepa Nair, M.S., D.N.B., D.O.R.L., and Rajendra Badwe, M.S., for the Head and Neck Disease Management Group

N ENGL J MED 373;6 NEJM.ORG AUGUST 6, 2015

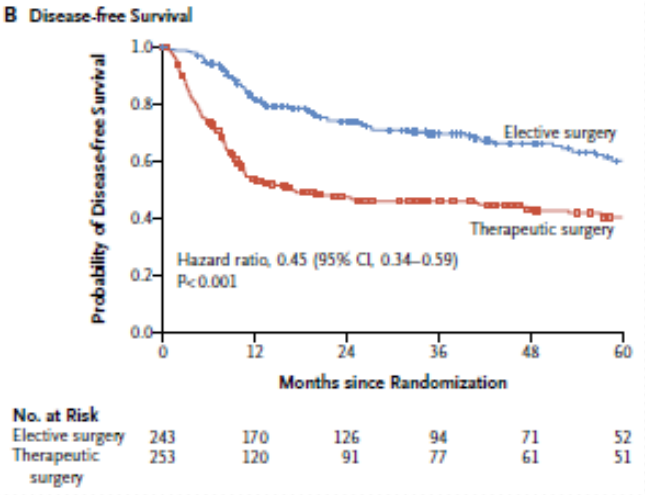

1281 Patients with T1 or T2 node-negative oral cancer were assessed for eligibility
685 Were excluded
244 Did not meet inclusion criteria
441 Declined to participate
596 Underwent randomization
298 Were assigned to undergo elective surgery and underwent secondary randomization for follow-up
298 Were assigned to undergo therapeutic surgery and underwent secondary randomization for follow-up
157 Were assigned to physical examination only
141 Were assigned to physical examination plus ultrasonography
143 Were assigned to physical examination only
155 Were assigned to physical examination plus ultrasonography
55 Were excluded
2 Had lesion crossing midline
53 Did not complete 9-mo follow-up
45 Were excluded
1 Withdrew consent
1 Had previous chemotherapy
43 Did not complete 9-mo follow-up
243 Were included in the analysis
253 Were included in the analysis

Overall Survival



80% (END) Vs 67.5%(WW)

Disease Free Survival



69.5% (END) Vs 45.9%(WW)

- Rates of adverse events were 6.6% & 3.6% in the END Vs WW
- Among patients with early-stage oral SCC, elective neck dissection resulted in higher rates of OS and DFS than did therapeutic neck dissection.

MANAGEMENT OF ORAL CAVITY CANCER

Advanced Oral Cavity Cancer (Stage III and IV)

Treatment Options

- Patients with resectable disease fit for surgery should have surgical resection with reconstruction.
- Considerations before surgery:
  - Likelihood of adequate surgical margins .
  - Acceptable morbidity.
  - Functional outcome.
  - Quality of life.

Organ Preservation

- Organ preservation approach considered when:
  - Tumour cannot be adequately resected.
  - Patient's general condition precludes surgery.
  - Patient does not wish to undergo surgical resection.

MANAGEMENT OF ORAL CAVITY CANCER

Advanced Oral Cavity Cancer (Stage III and IV)

Nodal Disease

- Node +ve disease: treated by selective or comprehensive node dissection
- High volume multi-level disease: more comprehensive dissection.
- Elective dissection of contralateral neck considered if:
  - Primary tumour locally advanced.
  - Primary arises from midline.
  - If multiple ipsilateral nodes involved.
- Clinically node +ve neck patients- T/t based on planned pri. T/t .
- If organ preservation approach selected as primary treatment, neck dissection planned in patients with clinical or radiologic evidence of residual disease and control of primary site.
- Panned neck dissection for N2 & N3 disease-role controversial.

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journal homepage: www.elsevier.com/locate/oraloncology

Review

Consensus recommendations for management of head and neck cancer in Asian countries: A review of international guidelines

A. D'cruz[a], T. Lin[b], A.K. Anand[c], D. Atmakusuma[d], M.J. Calaguas[e], I. Chitapanarux[f], B.C. Cho[g], B.C. Goh[h], Y. Guo[i], W.S. Hsieh[j], C. Hu[i], D. Kwong[k], J.C. Lin[l], P.J. Lou[m], T. Lu[b], K. Prabhash[a], V. Sriuranpong[n], P. Tang[o], V.V. Vu[p], I. Wahid[q], K.K. Ang[r], A.T. Chan[s,*]

RECOMMENDATIONS FOR ORAL CANCER MANAGEMENT IN ASIAN PATIENTS

- NCCN and ESMO groups have developed a comprehensive set of guidelines for management.
- Overall agreement with these guidelines amongst Asian Expert Gr
- Asian expert panel-some revisions for management based on real-world circumstances in Asia.
- Main framework drawn from NCCN guidelines, which are more comprehensive and provide greater clarity for adoption in day-to-day clinical practice.
- ESMO guidelines used as consensus summary guideline-special reference made to these guidelines when applicable.
- At all stages, a MDT approach with cross-specialty representation and opinion sharing at tumour boards strongly advocated.

RECOMMENDATIONS FOR ORAL CANCER MANAGEMENT IN ASIAN PATIENTS

- Access to and use of PET and IMRT limited to the major oncology healthcare facilities across the Asia–Pacific region.
- Unless superiority of this diagnostic or radiation technology is established in clinical setting and supported by literature, expert group decided against strongly recommending one modality over standard or conventional methods.

RECOMMENDATIONS FOR ORAL CANCER MANAGEMENT IN ASIAN PATIENTS

Lip **Stage I and II**

- Excision may not be upfront & best approach, with regard to functional and cosmetic results- non availability of specialized reconstructive surgeon and availability of infrastructure
- MDT discussion, keeping patient preference in mind,

Stage III, IVA and IVB

- Disease localized to lip-patient preference taken into account when determining appropriate course of treatment.
- Patients undergoing excision-adjuvant weekly cisplatin (30–40 mg/m^2) +RT as subsequent therapy in patients with T3/T4a N0.
- Any T and N1–3 disease- differences in clinical practice- 3-weekly cisplatin regimen remains optional in Asia.
- ESMO guidelines-surgery+PORT (including POCT with single-agent platinum in patients with high risk features)- in patients with stage IVB resectable cancer of the lip.

RECOMMENDATIONS FOR ORAL CANCER MANAGEMENT IN ASIAN PATIENTS

Oral cavity

Stage I, II, III and IVA

- Recommendations for Asian patients with stage I, II, III and IVA oral cavity disease - same as those advocated in the NCCN V2 2011 guidelines.13
- Patients with stage III and IV tumors unsuitable for surgery or with unresectable disease:
  - CCRT *or* cetuximab +RT are alternative options,
  - Preferable to RT alone.
- N0 neck disease- plain observation after CCRT may be followed.
- Node +ve positive cases- neck dissection considered in case of residual disease in the neck with primary controlled.


THANK YOU